Women's Role in Biodiversity Management in the Himalayas

Tara Devi Dhakal, dtara2008@yahoo.com and Brigitte Leduc, Senior Gender Specialist, ICIMOD, bleduc@icimod.org

omen of the Himalayas are users, custodians, and managers of biodiversity and play a critical role in its conservation. Their knowledge is crucial for food security, health, and the general well being of mountain communities. It is becoming critical for adaption to the growing challenges of climate change.

Despite this, few conservation initiatives acknowledge women's role and knowledge. Even worse, their rights over the natural resources that sustain their households and communities are often challenged by changes in land use, the conversion of natural resources into commodities, and even conservation programmes. New schemes of payment for ecosystem services rarely give value to women's significant contribution to the ecosystem services.

Communities living in the Himalayas are repositories of traditional knowledge related to biodiversity, which is vital for their own survival in the mountain ecosystem. They have contributed to the enormous pool of biological resources and contributed in its maintenance through their rich culture and traditional knowledge.

Biodiversity conservation and management entails sustainable use of biological resources, which is often gendered. Studies have shown that men's and women's preferences and utilisation of biological resources and conservation practices are not always the same. Women prefer biological resources for use in households, whereas men prefer to use these resources

Different Roles in Mountain Livelihoods: Different Knowledge on Biodiversity

Women's role in conservation – particularly in preserving high quality seeds – was noticeable among the Apatani, Mizo, Naga, and Garhwali communities in the northeastern and western Indian Himalayas. Here women were the major food producers and both men and women shared responsibility (UNDP/FAO 2001).

In the Drosh Valley of Chitral in Pakistan, men's knowledge of fruiting plant species depends on their utility for furniture making, fuelwood, thatching materials, and making sheds and shelters (Aumeeruddy-Thomas and Shengji 2003).

to earn income. Thus, women and men have traditional knowledge on different resources and different knowledge of the same resources.

In the Himalayas, women play a crucial role in enhancing, maintaining, and using biodiversity sustainably, particularly agriculture and forest resources. This role cannot be ignored. They are active participants in household and subsistence agricultural activities and invest most of their productive life in the land-based production process (ICIMOD 1997; Aumeeruddy-Thomas and Shengji 2003).

Knowledge held by men and women is different and varies according to their age, ethnicity, geographical



location, and roles in their household and society. As primary users and managers of subsistence resources, and playing a critical role in food production and caring for the wellbeing of household members, women have tremendous knowledge about medicines, food, and other uses of diverse plant species (Byers and Sainju 1994). They hold critical knowledge on biological resources and associated traditional knowledge specifically related to ailments related to reproductive health and agricultural practices. In the Himalayan mountain communities, 80-90% of seed requirements of all farm-household crops are met through traditional seed management and exchange systems, where the role of women is very significant (Shrestha 1998; Kerkhoff and Sharma 2006). Women are custodians of traditional knowledge related to seeds and maintain a diverse genetic pool of resources, which contributes to in situ conservation (Shrestha 1998).

A study on Mizo women in North East India showed that they are primarily responsible for seed storage

Preserving Biodiversity through Home Gardens

A study done in 30 home gardens of the Marma tribe in Rangamati Hill District in Bangladesh revealed that women were primarily responsible for maintaining home gardens that contributed to the conservation of a genetic pool of 19 perennial species of food and fruit crops (69%), timber (26%) and ornamental plants (Aumeeruddy-Thomas and Shengji 2003).

In Chandigre village, Meghalaya in North East Indian, 37 seasonal crops and 30 perennial crops were maintained in home gardens (Kerkhoff and Sharma 2006).

> within the household (UNDP/FAO 2001). In Kaski, Bara, and Jumla districts of Nepal, women are major decision makers in the selection of finger millet and taro seed and decide on the criteria for seed selection. For millet, they prefer large and mature ear size, larger grains, and seed free from diseases and pests. For taro, women prefer seed from less eyed, large size, and disease and pest free stock (Baniya et al 2005).

Long-term sustainable conservation of agrobiodiversity and the future needs of genetic biodiversity can be fulfilled

Chitral, Pakistan (left); Garo Hills, Shillong, India (below)



through resourceful men and women. Their knowledge and practices are becoming even more critical for adapting to the effects of climate change. However, in the Himalayas, the critical role of women and men in biodiversity conservation and management and their vast repository of traditional knowledge, developed over centuries of experience, has not been well documented.

Rarely has research on biodiversity and conservation practices adopted a gender perspective and carried out a gender analysis. This may impede the development of fair access and benefit sharing policies that would protect women's rights over biological resources. It is necessary to document and recognise the gender perspective – the different roles, preferences, and needs of women and men – in biodiversity conservation and management in order to achieve sustainable mountain economies and biodiversity conservation.

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